

Figure 3

Groundwater samples in Windy Gulch were collected on September 13, 2021

Sample Locations:

- 1) HW-2
- 2) DP-3 * Not enough water to sample
- 3) DP-4 * Not enough water to sample
- 4) DP-5

Refer to Map G-3, Appendix 4 for sample locations.

GW-1 in the analytical results is a field duplication sample for HW-2.

September 29, 2021

Report to:
Randy McClure
Rio Grande Silver, Inc.
112 E. 12th St.
Creede, CO 81130

Bill to:
Randy McClure
Rio Grande Silver, Inc.
P.O. Box 610
Creede, CO 81130

cc: Janet Shangraw

Project ID:
ACZ Project ID: L68448

Randy McClure:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 14, 2021. This project has been assigned to ACZ's project number, L68448. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68448. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after October 29, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically \$11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.



Sue Webber has reviewed and
approved this report.



Rio Grande Silver, Inc.

September 29, 2021

Project ID:

ACZ Project ID: L68448

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 3 groundwater samples from Rio Grande Silver, Inc. on September 14, 2021. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L68448. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times.

Sample Analysis

These samples were analyzed for inorganic, organic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following required further explanation not provided by the Extended Qualifier Report:

1. Oil and Grease (RJ) - The LCSW/LCSWD RPD or RSD exceeded the method or laboratory control limit. At a minimum, one LCSW recovery met acceptance criteria.

Rio Grande Silver, Inc.

Project ID:

Sample ID: HW-2

ACZ Sample ID: **L68448-01**

Date Sampled: 09/13/21 10:35

Date Received: 09/14/21

Sample Matrix: Groundwater

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								09/21/21 12:05	bls/md
Total Recoverable Digestion	M200.2 ICP-MS								09/20/21 9:34	bsu
Total Recoverable Digestion	M200.2 ICP								09/17/21 17:47	jlw

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	09/20/21 18:20	kja
Aluminum, total recoverable	M200.7 ICP	1	0.723			mg/L	0.05	0.25	09/20/21 20:02	jlw
Arsenic, dissolved	M200.8 ICP-MS	1	0.00798			mg/L	0.0002	0.001	09/21/21 16:15	mfm
Arsenic, total recoverable	M200.8 ICP-MS	1	0.00834			mg/L	0.0002	0.001	09/21/21 14:58	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.00284			mg/L	0.00005	0.00025	09/21/21 16:15	mfm
Cadmium, total recoverable	M200.8 ICP-MS	1	0.00308			mg/L	0.00005	0.00025	09/21/21 14:58	mfm
Calcium, dissolved	M200.7 ICP	1	33.2			mg/L	0.1	0.5	09/20/21 18:20	kja
Copper, dissolved	M200.8 ICP-MS	1	0.00115	B		mg/L	0.0008	0.002	09/21/21 16:15	mfm
Copper, total recoverable	M200.8 ICP-MS	1	0.00223			mg/L	0.0008	0.002	09/21/21 14:58	mfm
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	09/20/21 18:20	kja
Iron, total recoverable	M200.7 ICP	1	0.485			mg/L	0.06	0.15	09/20/21 20:02	jlw
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	09/21/21 16:15	mfm
Lead, total recoverable	M200.8 ICP-MS	1	0.00195			mg/L	0.0001	0.0005	09/21/21 14:58	mfm
Magnesium, dissolved	M200.7 ICP	1	3.15			mg/L	0.2	1	09/21/21 12:56	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	09/20/21 18:20	kja
Manganese, total recoverable	M200.7 ICP	1	0.037	B		mg/L	0.01	0.05	09/20/21 20:02	jlw
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	09/20/21 13:52	mlh
Potassium, dissolved	M200.7 ICP	1	3.40			mg/L	0.2	1	09/20/21 18:20	kja
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	09/21/21 16:15	mfm
Silver, total recoverable	M200.8 ICP-MS	1	0.00028	B		mg/L	0.0001	0.0005	09/21/21 14:58	mfm
Sodium, dissolved	M200.7 ICP	1	6.82			mg/L	0.2	1	09/20/21 18:20	kja
Zinc, dissolved	M200.8 ICP-MS	1	0.591			mg/L	0.006	0.015	09/21/21 16:15	mfm
Zinc, total recoverable	M200.8 ICP-MS	1	0.618		*	mg/L	0.006	0.015	09/21/21 14:58	mfm

Rio Grande Silver, Inc.

Project ID:

Sample ID: HW-2

ACZ Sample ID: **L68448-01**

Date Sampled: 09/13/21 10:35

Date Received: 09/14/21

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	27.1			mg/L	2	20	09/23/21 0:00	emk
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	09/23/21 0:00	emk
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	09/23/21 0:00	emk
Total Alkalinity		1	27.1			mg/L	2	20	09/23/21 0:00	emk
Carbon, dissolved organic (DOC)	SM5310B	1	2.4	B	*	mg/L	1	5	09/17/21 16:23	md
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			09/29/21 0:00	calc
Sum of Anions			2.3			meq/L			09/29/21 0:00	calc
Sum of Cations			2.3			meq/L			09/29/21 0:00	calc
Chloride	M300.0 - Ion Chromatography	2	1.42	B	*	mg/L	0.8	4	09/21/21 19:17	krh
Fluoride	SM4500F-C	1	0.35			mg/L	0.15	0.35	09/21/21 14:35	eep
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		96			mg/L	0.2	5	09/29/21 0:00	calc
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.228			mg/L	0.02	0.1	09/29/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.228			mg/L	0.02	0.1	09/15/21 1:01	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	09/15/21 1:01	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1	0.063	B	*	mg/L	0.05	0.2	09/26/21 18:18	syw
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH ₃		0.417	B		mg/L	0.2	0.5	09/29/21 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1	0.48	B	*	mg/L	0.2	0.5	09/23/21 22:05	pjb
pH (lab)	SM4500H+ B									
pH		1	7.4	H		units	0.1	0.1	09/23/21 0:00	emk
pH measured at		1	21.7			C	0.1	0.1	09/23/21 0:00	emk
Residue, Filterable (TDS) @180C	SM2540C	2	184		*	mg/L	40	80	09/17/21 13:20	emk
Sulfate	M300.0 - Ion Chromatography	2	79.7		*	mg/L	0.8	4	09/21/21 19:17	krh
Sulfide as S	SM4500S2-D	1	<0.02	U	*	mg/L	0.02	0.1	09/14/21 15:07	jck
TDS (calculated)	Calculation		146			mg/L			09/29/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.26						09/29/21 0:00	calc

Rio Grande Silver, Inc.

Project ID:

Sample ID: GW-1

ACZ Sample ID: **L68448-02**

Date Sampled: 09/13/21 11:00

Date Received: 09/14/21

Sample Matrix: Groundwater

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								09/21/21 12:21	bls/md
Total Recoverable Digestion	M200.2 ICP-MS								09/20/21 9:52	bsu
Total Recoverable Digestion	M200.2 ICP								09/17/21 18:01	jlw

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	09/20/21 18:23	kja
Aluminum, total recoverable	M200.7 ICP	1	1.31			mg/L	0.05	0.25	09/20/21 20:05	jlw
Arsenic, dissolved	M200.8 ICP-MS	1	0.00844			mg/L	0.0002	0.001	09/21/21 16:17	mfm
Arsenic, total recoverable	M200.8 ICP-MS	1	0.00915			mg/L	0.0002	0.001	09/21/21 15:00	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.00354			mg/L	0.00005	0.00025	09/21/21 16:17	mfm
Cadmium, total recoverable	M200.8 ICP-MS	1	0.00359			mg/L	0.00005	0.00025	09/21/21 15:00	mfm
Calcium, dissolved	M200.7 ICP	1	34.2			mg/L	0.1	0.5	09/20/21 18:23	kja
Copper, dissolved	M200.8 ICP-MS	1	0.00172	B		mg/L	0.0008	0.002	09/21/21 16:17	mfm
Copper, total recoverable	M200.8 ICP-MS	1	0.00321			mg/L	0.0008	0.002	09/21/21 15:00	mfm
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	09/20/21 18:23	kja
Iron, total recoverable	M200.7 ICP	1	0.850			mg/L	0.06	0.15	09/20/21 20:05	jlw
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	09/21/21 16:17	mfm
Lead, total recoverable	M200.8 ICP-MS	1	0.00338			mg/L	0.0001	0.0005	09/21/21 15:00	mfm
Magnesium, dissolved	M200.7 ICP	1	3.19			mg/L	0.2	1	09/21/21 12:59	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	09/20/21 18:23	kja
Manganese, total recoverable	M200.7 ICP	1	0.053			mg/L	0.01	0.05	09/20/21 20:05	jlw
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	09/20/21 13:55	mlh
Potassium, dissolved	M200.7 ICP	1	3.35			mg/L	0.2	1	09/20/21 18:23	kja
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	09/21/21 16:17	mfm
Silver, total recoverable	M200.8 ICP-MS	1	0.00055			mg/L	0.0001	0.0005	09/21/21 15:00	mfm
Sodium, dissolved	M200.7 ICP	1	6.85			mg/L	0.2	1	09/20/21 18:23	kja
Zinc, dissolved	M200.8 ICP-MS	1	0.667			mg/L	0.006	0.015	09/21/21 16:17	mfm
Zinc, total recoverable	M200.8 ICP-MS	1	0.685		*	mg/L	0.006	0.015	09/21/21 15:00	mfm

Rio Grande Silver, Inc.

Project ID:

Sample ID: GW-1

ACZ Sample ID: **L68448-02**

Date Sampled: 09/13/21 11:00

Date Received: 09/14/21

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	25.5			mg/L	2	20	09/23/21 0:00	emk
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	09/23/21 0:00	emk
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	09/23/21 0:00	emk
Total Alkalinity		1	25.5			mg/L	2	20	09/23/21 0:00	emk
Carbon, dissolved organic (DOC)	SM5310B	1	3.5	B	*	mg/L	1	5	09/17/21 16:49	md
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			09/29/21 0:00	calc
Sum of Anions			2.4			meq/L			09/29/21 0:00	calc
Sum of Cations			2.4			meq/L			09/29/21 0:00	calc
Chloride	M300.0 - Ion Chromatography	1	1.43	B	*	mg/L	0.4	2	09/21/21 19:53	krh
Fluoride	SM4500F-C	1	0.34	B		mg/L	0.15	0.35	09/21/21 14:54	eep
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		99			mg/L	0.2	5	09/29/21 0:00	calc
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.227			mg/L	0.02	0.1	09/29/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.227			mg/L	0.02	0.1	09/15/21 1:03	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	09/15/21 1:03	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 18:19	syw
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH ₃		0.5			mg/L	0.2	0.5	09/29/21 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1	0.49	B	*	mg/L	0.2	0.5	09/23/21 22:06	pjb
pH (lab)	SM4500H+ B									
pH		1	7.2	H		units	0.1	0.1	09/23/21 0:00	emk
pH measured at		1	22.0			C	0.1	0.1	09/23/21 0:00	emk
Residue, Filterable (TDS) @180C	SM2540C	2	196		*	mg/L	40	80	09/17/21 13:24	emk
Sulfate	M300.0 - Ion Chromatography	1	84.0		*	mg/L	0.4	2	09/21/21 19:53	krh
Sulfide as S	SM4500S2-D	1	<0.02	U	*	mg/L	0.02	0.1	09/14/21 15:23	jck
TDS (calculated)	Calculation		151			mg/L			09/29/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.30						09/29/21 0:00	calc

Rio Grande Silver, Inc.

Project ID:

Sample ID: DP-5

ACZ Sample ID: **L68448-03**

Date Sampled: 09/13/21 10:00

Date Received: 09/14/21

Sample Matrix: Groundwater

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								09/21/21 12:55	bls/md
Total Recoverable Digestion	M200.2 ICP-MS								09/20/21 10:09	bsu
Total Recoverable Digestion	M200.2 ICP								09/17/21 18:15	jlw

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	09/20/21 18:26	kja
Aluminum, total recoverable	M200.7 ICP	2	4.02			mg/L	0.1	0.5	09/20/21 20:08	jlw
Arsenic, dissolved	M200.8 ICP-MS	1	0.0110			mg/L	0.0002	0.001	09/21/21 16:22	mfm
Arsenic, total recoverable	M200.8 ICP-MS	1	0.0622			mg/L	0.0002	0.001	09/21/21 15:02	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.00218			mg/L	0.00005	0.00025	09/21/21 16:22	mfm
Cadmium, total recoverable	M200.8 ICP-MS	1	0.00874			mg/L	0.00005	0.00025	09/21/21 15:02	mfm
Calcium, dissolved	M200.7 ICP	1	39.3			mg/L	0.1	0.5	09/20/21 18:26	kja
Copper, dissolved	M200.8 ICP-MS	1	0.00128	B		mg/L	0.0008	0.002	09/21/21 16:22	mfm
Copper, total recoverable	M200.8 ICP-MS	1	0.0139			mg/L	0.0008	0.002	09/21/21 15:02	mfm
Iron, dissolved	M200.7 ICP	1	0.564			mg/L	0.06	0.15	09/20/21 18:26	kja
Iron, total recoverable	M200.7 ICP	2	11.1			mg/L	0.12	0.3	09/20/21 20:08	jlw
Lead, dissolved	M200.8 ICP-MS	1	0.00532			mg/L	0.0001	0.0005	09/21/21 16:22	mfm
Lead, total recoverable	M200.8 ICP-MS	1	0.191			mg/L	0.0001	0.0005	09/21/21 15:02	mfm
Magnesium, dissolved	M200.7 ICP	1	3.93			mg/L	0.2	1	09/21/21 13:02	kja
Manganese, dissolved	M200.7 ICP	1	0.106			mg/L	0.01	0.05	09/20/21 18:26	kja
Manganese, total recoverable	M200.7 ICP	2	0.370			mg/L	0.02	0.1	09/20/21 20:08	jlw
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	09/20/21 13:56	mlh
Potassium, dissolved	M200.7 ICP	1	2.95			mg/L	0.2	1	09/20/21 18:26	kja
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	09/21/21 16:22	mfm
Silver, total recoverable	M200.8 ICP-MS	1	0.00324			mg/L	0.0001	0.0005	09/21/21 15:02	mfm
Sodium, dissolved	M200.7 ICP	1	9.90			mg/L	0.2	1	09/20/21 18:26	kja
Zinc, dissolved	M200.8 ICP-MS	1	3.05			mg/L	0.006	0.015	09/21/21 16:22	mfm
Zinc, total recoverable	M200.8 ICP-MS	1	8.71		*	mg/L	0.006	0.015	09/21/21 15:02	mfm

Rio Grande Silver, Inc.

Project ID:

Sample ID: DP-5

ACZ Sample ID: **L68448-03**

Date Sampled: 09/13/21 10:00

Date Received: 09/14/21

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	66.3			mg/L	2	20	09/23/21 0:00	emk
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	09/23/21 0:00	emk
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	09/23/21 0:00	emk
Total Alkalinity		1	66.3			mg/L	2	20	09/23/21 0:00	emk
Carbon, dissolved organic (DOC)	SM5310B	1	2.3	B	*	mg/L	1	5	09/17/21 17:16	md
Cation-Anion Balance	Calculation									
Cation-Anion Balance			1.8			%			09/29/21 0:00	calc
Sum of Anions			2.8			meq/L			09/29/21 0:00	calc
Sum of Cations			2.9			meq/L			09/29/21 0:00	calc
Chloride	M300.0 - Ion Chromatography	1	2.72		*	mg/L	0.4	2	09/21/21 20:11	krh
Fluoride	SM4500F-C	1	0.52			mg/L	0.15	0.35	09/21/21 15:02	eep
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		114			mg/L	0.2	5	09/29/21 0:00	calc
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.267			mg/L	0.02	0.1	09/29/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.267			mg/L	0.02	0.1	09/15/21 1:09	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	09/15/21 1:09	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 18:24	syw
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH ₃		0.9			mg/L	0.2	0.5	09/29/21 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1	0.88		*	mg/L	0.2	0.5	09/23/21 22:09	pjb
pH (lab)	SM4500H+ B									
pH		1	7.7	H		units	0.1	0.1	09/23/21 0:00	emk
pH measured at		1	21.9			C	0.1	0.1	09/23/21 0:00	emk
Residue, Filterable (TDS) @180C	SM2540C	1	214		*	mg/L	20	40	09/17/21 13:26	emk
Sulfate	M300.0 - Ion Chromatography	1	65.7		*	mg/L	0.4	2	09/21/21 20:11	krh
Sulfide as S	SM4500S2-D	1	0.024	B	*	mg/L	0.02	0.1	09/14/21 15:38	jck
TDS (calculated)	Calculation		170			mg/L			09/29/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.26						09/29/21 0:00	calc

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3

SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527916													
WG527916PBW1	PBW	09/23/21 17:14				U	mg/L		-20	20			
WG527916LCSW3	LCSW	09/23/21 17:33	WC210917-2	820.0001		823.2	mg/L	100	90	110			
L68495-01DUP	DUP	09/23/21 20:53			66.4	65.7	mg/L				1	20	
WG527916LCSW6	LCSW	09/23/21 21:12	WC210917-2	820.0001		812.1	mg/L	99	90	110			
WG527916PBW2	PBW	09/23/21 21:19				U	mg/L		-20	20			
WG527916LCSW9	LCSW	09/24/21 0:50	WC210917-2	820.0001		813.9	mg/L	99	90	110			
WG527916PBW3	PBW	09/24/21 0:57				U	mg/L		-20	20			
WG527916LCSW12	LCSW	09/24/21 5:02	WC210917-2	820.0001		818.3	mg/L	100	90	110			
WG527916PBW4	PBW	09/24/21 5:09				U	mg/L		-20	20			
WG527916LCSW15	LCSW	09/24/21 8:38	WC210917-2	820.0001		821.1	mg/L	100	90	110			

Aluminum, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527569													
WG527569ICV	ICV	09/20/21 17:59	II210916-1	2		1.945	mg/L	97	95	105			
WG527569ICB	ICB	09/20/21 18:05				U	mg/L		-0.15	0.15			
WG527569PQV	PQV	09/20/21 18:08	II210901-4	.250325		.219	mg/L	87	70	130			
WG527569SIC	SIC	09/20/21 18:11	II210907-1	200.410325		205.3	mg/L	102	1	200			
WG527569LFB	LFB	09/20/21 18:17	II210910-2	1.0008		.981	mg/L	98	85	115			
L68460-02AS	AS	09/20/21 18:36	II210910-2	1.0008	U	1.029	mg/L	103	85	115			
L68460-02ASD	ASD	09/20/21 18:39	II210910-2	1.0008	U	1.023	mg/L	102	85	115	1	20	
WG527569CCV1	CCV	09/20/21 18:48	II210916-2	1		.954	mg/L	95	90	110			
WG527569CCB1	CCB	09/20/21 18:51				U	mg/L		-0.15	0.15			
WG527569CCV2	CCV	09/20/21 19:25	II210916-2	1		.978	mg/L	98	90	110			
WG527569CCB2	CCB	09/20/21 19:28				U	mg/L		-0.15	0.15			
WG527569CCV3	CCV	09/20/21 19:47	II210916-2	1		.992	mg/L	99	90	110			
WG527569CCB3	CCB	09/20/21 19:50				U	mg/L		-0.15	0.15			

Aluminum, total recoverable

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527560													
WG527560ICV	ICV	09/20/21 18:15	II210916-1	2		2.041	mg/L	102	95	105			
WG527560ICB	ICB	09/20/21 18:21				.053	mg/L		-0.15	0.15			
WG527560PQV	PQV	09/20/21 18:24	II210901-4	.250325		.305	mg/L	122	70	130			
WG527560SIC	SIC	09/20/21 18:27	II210907-1	200.410325		205.8	mg/L	103	1	200			
WG527464LRB	LRB	09/20/21 18:34				.061	mg/L		-0.11	0.11			
WG527464LFB	LFB	09/20/21 18:37	II210910-2	1.0008		1.045	mg/L	104	85	115			
WG527560CCV1	CCV	09/20/21 19:06	II210916-2	1		1.05	mg/L	105	90	110			
WG527560CCB1	CCB	09/20/21 19:09				.055	mg/L		-0.15	0.15			
WG527560CCV2	CCV	09/20/21 19:45	II210916-2	1		1.063	mg/L	106	90	110			
WG527560CCB2	CCB	09/20/21 19:49				.051	mg/L		-0.15	0.15			
L68418-10LFM	LFM	09/20/21 19:55	II210910-2	1.0008	.251	1.395	mg/L	114	70	130			
L68418-10LFMD	LFMD	09/20/21 19:58	II210910-2	1.0008	.251	1.408	mg/L	116	70	130	1	20	
WG527560CCV3	CCV	09/20/21 20:11	II210916-2	1		1.057	mg/L	106	90	110			
WG527560CCB3	CCB	09/20/21 20:14				.054	mg/L		-0.15	0.15			

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Arsenic, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527694													
WG527694ICV	ICV	09/21/21 16:06	MS210727-2	.05		.05022	mg/L	100	90	110			
WG527694ICB	ICB	09/21/21 16:07				U	mg/L		-0.00044	0.00044			
WG527694LFB	LFB	09/21/21 16:09	MS210827-2	.05005		.05117	mg/L	102	85	115			
L68448-02AS	AS	09/21/21 16:18	MS210827-2	.05005	.00844	.0594	mg/L	102	70	130			
L68448-02ASD	ASD	09/21/21 16:20	MS210827-2	.05005	.00844	.06118	mg/L	105	70	130	3	20	
WG527694CCV1	CCV	09/21/21 16:28	MS210909-2	.1001		.10208	mg/L	102	90	110			
WG527694CCB1	CCB	09/21/21 16:29				U	mg/L		-0.0006	0.0006			
WG527694CCV2	CCV	09/21/21 16:50	MS210909-2	.1001		.09793	mg/L	98	90	110			
WG527694CCB2	CCB	09/21/21 16:51				U	mg/L		-0.0006	0.0006			
WG527694CCV3	CCV	09/21/21 17:03	MS210909-2	.1001		.09966	mg/L	100	90	110			
WG527694CCB3	CCB	09/21/21 17:04				U	mg/L		-0.0006	0.0006			

Arsenic, total recoverable

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527692													
WG527692ICV	ICV	09/21/21 14:51	MS210727-2	.05		.05054	mg/L	101	90	110			
WG527692ICB	ICB	09/21/21 14:53				U	mg/L		-0.0006	0.0006			
WG527530LRB	LRB	09/21/21 14:54				U	mg/L		-0.00044	0.00044			
WG527530LFB	LFB	09/21/21 14:56	MS210827-2	.05005		.04967	mg/L	99	85	115			
L68448-03LFM	LFM	09/21/21 15:03	MS210827-2	.05005	.0622	.11362	mg/L	103	70	130			
L68448-03LFMD	LFMD	09/21/21 15:05	MS210827-2	.05005	.0622	.11072	mg/L	97	70	130	3	20	
WG527692CCV1	CCV	09/21/21 15:13	MS210909-2	.1001		.1007	mg/L	101	90	110			
WG527692CCB1	CCB	09/21/21 15:14				U	mg/L		-0.0006	0.0006			
WG527692CCV2	CCV	09/21/21 15:34	MS210909-2	.1001		.09924	mg/L	99	90	110			
WG527692CCB2	CCB	09/21/21 15:36				U	mg/L		-0.0006	0.0006			
WG527692CCV3	CCV	09/21/21 15:49	MS210909-2	.1001		.10026	mg/L	100	90	110			
WG527692CCB3	CCB	09/21/21 15:51				U	mg/L		-0.0006	0.0006			

Cadmium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527694													
WG527694ICV	ICV	09/21/21 16:06	MS210727-2	.05		.05096	mg/L	102	90	110			
WG527694ICB	ICB	09/21/21 16:07				U	mg/L		-0.00011	0.00011			
WG527694LFB	LFB	09/21/21 16:09	MS210827-2	.05005		.050769	mg/L	101	85	115			
L68448-02AS	AS	09/21/21 16:18	MS210827-2	.05005	.00354	.054778	mg/L	102	70	130			
L68448-02ASD	ASD	09/21/21 16:20	MS210827-2	.05005	.00354	.055999	mg/L	105	70	130	2	20	
WG527694CCV1	CCV	09/21/21 16:28	MS210909-2	.1001		.100901	mg/L	101	90	110			
WG527694CCB1	CCB	09/21/21 16:29				U	mg/L		-0.00015	0.00015			
WG527694CCV2	CCV	09/21/21 16:50	MS210909-2	.1001		.098654	mg/L	99	90	110			
WG527694CCB2	CCB	09/21/21 16:51				U	mg/L		-0.00015	0.00015			
WG527694CCV3	CCV	09/21/21 17:03	MS210909-2	.1001		.099767	mg/L	100	90	110			
WG527694CCB3	CCB	09/21/21 17:04				U	mg/L		-0.00015	0.00015			

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium, total recoverable

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527692													
WG527692ICV	ICV	09/21/21 14:51	MS210727-2	.05		.049942	mg/L	100	90	110			
WG527692ICB	ICB	09/21/21 14:53				.000065	mg/L		-0.00015	0.00015			
WG527530LRB	LRB	09/21/21 14:54				U	mg/L		-0.00011	0.00011			
WG527530LFB	LFB	09/21/21 14:56	MS210827-2	.05005		.048744	mg/L	97	85	115			
L68448-03LFM	LFM	09/21/21 15:03	MS210827-2	.05005	.00874	.058027	mg/L	98	70	130			
L68448-03LFMD	LFMD	09/21/21 15:05	MS210827-2	.05005	.00874	.057308	mg/L	97	70	130	1	20	
WG527692CCV1	CCV	09/21/21 15:13	MS210909-2	.1001		.099581	mg/L	99	90	110			
WG527692CCB1	CCB	09/21/21 15:14				U	mg/L		-0.00015	0.00015			
WG527692CCV2	CCV	09/21/21 15:34	MS210909-2	.1001		.099984	mg/L	100	90	110			
WG527692CCB2	CCB	09/21/21 15:36				U	mg/L		-0.00015	0.00015			
WG527692CCV3	CCV	09/21/21 15:49	MS210909-2	.1001		.099164	mg/L	99	90	110			
WG527692CCB3	CCB	09/21/21 15:51				U	mg/L		-0.00015	0.00015			

Calcium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527569													
WG527569ICV	ICV	09/20/21 17:59	II210916-1	100		96.76	mg/L	97	95	105			
WG527569ICB	ICB	09/20/21 18:05				.29	mg/L		-0.3	0.3			
WG527569PQV	PQV	09/20/21 18:08	II210901-4	.50015		.52	mg/L	104	70	130			
WG527569SIC	SIC	09/20/21 18:11	II210907-1	200.56015		194.4	mg/L	97	1	200			
WG527569LFB	LFB	09/20/21 18:17	II210910-2	67.98972		67.13	mg/L	99	85	115			
L68460-02AS	AS	09/20/21 18:36	II210910-2	67.98972	69.8	136.6	mg/L	98	85	115			
L68460-02ASD	ASD	09/20/21 18:39	II210910-2	67.98972	69.8	136.7	mg/L	98	85	115	0	20	
WG527569CCV1	CCV	09/20/21 18:48	II210916-2	50		48.83	mg/L	98	90	110			
WG527569CCB1	CCB	09/20/21 18:51				.16	mg/L		-0.3	0.3			
WG527569CCV2	CCV	09/20/21 19:25	II210916-2	50		49.85	mg/L	100	90	110			
WG527569CCB2	CCB	09/20/21 19:28				.1	mg/L		-0.3	0.3			
WG527569CCV3	CCV	09/20/21 19:47	II210916-2	50		50.42	mg/L	101	90	110			
WG527569CCB3	CCB	09/20/21 19:50				.2	mg/L		-0.3	0.3			

Carbon, dissolved organic (DOC)

SM5310B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527444													
WG527444CCV1	CCV	09/17/21 15:35	WI210903-5	50		53.7	mg/L	107	90	110			
WG527444CCB1	CCB	09/17/21 15:46				U	mg/L		-3	3			
WG527444PQV	PQV	09/17/21 15:57	WI210817-1	5		4.7	mg/L	94	70	130			
WG527444LFB	LFB	09/17/21 16:11	WI210817-3	50		54.1	mg/L	108	90	110			
L68448-01DUP	DUP	09/17/21 16:36			2.4	2.4	mg/L				0	20	RA
L68448-02AS	AS	09/17/21 17:04	WI210817-3	50	3.5	56.4	mg/L	106	90	110			
WG527444CCV2	CCV	09/17/21 18:31	WI210903-5	50		53.2	mg/L	106	90	110			
WG527444CCB2	CCB	09/17/21 18:41				U	mg/L		-3	3			
WG527444CCV3	CCV	09/17/21 21:30	WI210903-5	50		53.7	mg/L	107	90	110			
WG527444CCB3	CCB	09/17/21 21:41				U	mg/L		-3	3			

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chloride

M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523874													
WG523874ICV	ICV	07/22/21 20:38	WI210719-3	19.96		19.83	mg/L	99	90	110			
WG523874ICB	ICB	07/22/21 20:56				U	mg/L		-0.4	0.4			
WG527655													
WG527655CCV1	CCV	09/21/21 17:30	WI210915-3	50		49.34	mg/L	99	90	110			
WG527655CCB1	CCB	09/21/21 17:48				U	mg/L		-0.4	0.4			
WG527655PQV	PQV	09/21/21 18:06	WI210915-2	1.996		1.78	mg/L	89	70	130			
WG527655LFB1	LFB	09/21/21 18:24	WI210907-6	30		29.37	mg/L	98	90	110			
L68448-01AS	AS	09/21/21 19:35	WI210907-6	60	1.42	60.79	mg/L	99	90	110			
WG527655CCV2	CCV	09/21/21 21:05	WI210915-3	50		49.39	mg/L	99	90	110			
WG527655CCB2	CCB	09/21/21 21:23				U	mg/L		-0.4	0.4			
WG527655CCV3	CCV	09/22/21 0:40	WI210915-3	50		49.43	mg/L	99	90	110			
WG527655CCB3	CCB	09/22/21 0:58				U	mg/L		-0.4	0.4			
WG527655LFB2	LFB	09/22/21 3:03	WI210907-6	30		29.43	mg/L	98	90	110			
WG527655CCV4	CCV	09/22/21 4:15	WI210915-3	50		49.59	mg/L	99	90	110			
WG527655CCB4	CCB	09/22/21 4:33				U	mg/L		-0.4	0.4			
WG527655CCV5	CCV	09/22/21 7:32	WI210915-3	50		49.84	mg/L	100	90	110			
WG527655CCB5	CCB	09/22/21 7:50				U	mg/L		-0.4	0.4			
WG527655CCV6	CCV	09/23/21 14:49	WI210915-3	50		49.14	mg/L	98	90	110			
WG527655CCB6	CCB	09/23/21 15:07				U	mg/L		-0.4	0.4			
WG527655PQV1	PQV	09/23/21 15:25	WI210915-2	1.996		1.8	mg/L	90	70	130			
WG527655LFB1	LFB	09/23/21 15:43	WI210907-6	30		29.69	mg/L	99	90	110			
L68389-01DUP	DUP	09/23/21 16:18			1.01	1.01	mg/L				0	20	RA
WG527655CCV7	CCV	09/23/21 18:24	WI210915-3	50		49.14	mg/L	98	90	110			
WG527655CCB7	CCB	09/23/21 18:42				U	mg/L		-0.4	0.4			
WG527655LFB2	LFB	09/23/21 19:00	WI210907-6	30		29.5	mg/L	98	90	110			
WG527655CCV8	CCV	09/23/21 20:47	WI210915-3	50		49.15	mg/L	98	90	110			
WG527655CCB8	CCB	09/23/21 21:05				U	mg/L		-0.4	0.4			

Copper, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527694													
WG527694ICV	ICV	09/21/21 16:06	MS210727-2	.05		.05125	mg/L	103	90	110			
WG527694ICB	ICB	09/21/21 16:07				U	mg/L		-0.00176	0.00176			
WG527694LFB	LFB	09/21/21 16:09	MS210827-2	.05		.05091	mg/L	102	85	115			
L68448-02AS	AS	09/21/21 16:18	MS210827-2	.05	.00172	.04968	mg/L	96	70	130			
L68448-02ASD	ASD	09/21/21 16:20	MS210827-2	.05	.00172	.05114	mg/L	99	70	130	3	20	
WG527694CCV1	CCV	09/21/21 16:28	MS210909-2	.25		.25747	mg/L	103	90	110			
WG527694CCB1	CCB	09/21/21 16:29				U	mg/L		-0.0024	0.0024			
WG527694CCV2	CCV	09/21/21 16:50	MS210909-2	.25		.24393	mg/L	98	90	110			
WG527694CCB2	CCB	09/21/21 16:51				U	mg/L		-0.0024	0.0024			
WG527694CCV3	CCV	09/21/21 17:03	MS210909-2	.25		.24663	mg/L	99	90	110			
WG527694CCB3	CCB	09/21/21 17:04				U	mg/L		-0.0024	0.0024			

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, total recoverable

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527692													
WG527692ICV	ICV	09/21/21 14:51	MS210727-2	.05		.05054	mg/L	101	90	110			
WG527692ICB	ICB	09/21/21 14:53				U	mg/L		-0.0024	0.0024			
WG527530LRB	LRB	09/21/21 14:54				U	mg/L		-0.00176	0.00176			
WG527530LFB	LFB	09/21/21 14:56	MS210827-2	.05		.04882	mg/L	98	85	115			
L68448-03LFM	LFM	09/21/21 15:03	MS210827-2	.05	.0139	.0602	mg/L	93	70	130			
L68448-03LFMD	LFMD	09/21/21 15:05	MS210827-2	.05	.0139	.05883	mg/L	90	70	130	2	20	
WG527692CCV1	CCV	09/21/21 15:13	MS210909-2	.25		.25116	mg/L	100	90	110			
WG527692CCB1	CCB	09/21/21 15:14				U	mg/L		-0.0024	0.0024			
WG527692CCV2	CCV	09/21/21 15:34	MS210909-2	.25		.24863	mg/L	99	90	110			
WG527692CCB2	CCB	09/21/21 15:36				U	mg/L		-0.0024	0.0024			
WG527692CCV3	CCV	09/21/21 15:49	MS210909-2	.25		.2522	mg/L	101	90	110			
WG527692CCB3	CCB	09/21/21 15:51				U	mg/L		-0.0024	0.0024			

Fluoride

SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527652													
WG527652ICV	ICV	09/21/21 12:04	WC210920-1	2.002		2.19	mg/L	109	90	110			
WG527652ICB	ICB	09/21/21 12:09				U	mg/L		-0.3	0.3			
WG527652PQV	PQV	09/21/21 12:13	WC210803-3	.3514		.43	mg/L	122	70	130			
WG527652LFB1	LFB	09/21/21 12:16	WC210803-9	5.02		5.38	mg/L	107	90	110			
WG527652CCV1	CCV	09/21/21 13:30	WC210920-1	2.002		2.18	mg/L	109	90	110			
WG527652CCB1	CCB	09/21/21 13:36				U	mg/L		-0.3	0.3			
L68410-01AS	AS	09/21/21 14:08	WC210803-9	5.02	U	5.52	mg/L	110	90	110			
L68410-01ASD	ASD	09/21/21 14:11	WC210803-9	5.02	U	5.45	mg/L	109	90	110	1	20	
WG527652CCV2	CCV	09/21/21 14:38	WC210920-1	2.002		2.21	mg/L	110	90	110			
WG527652CCB2	CCB	09/21/21 14:46				U	mg/L		-0.3	0.3			
WG527652LFB2	LFB	09/21/21 15:31	WC210803-9	5.02		5.45	mg/L	109	90	110			
WG527652CCV3	CCV	09/21/21 15:43	WC210920-1	2.002		2.19	mg/L	109	90	110			
WG527652CCB3	CCB	09/21/21 15:51				U	mg/L		-0.3	0.3			
WG527652CCV4	CCV	09/21/21 16:15	WC210920-1	2.002		2.14	mg/L	107	90	110			
WG527652CCB4	CCB	09/21/21 16:23				U	mg/L		-0.3	0.3			

Iron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527569													
WG527569ICV	ICV	09/20/21 17:59	II210916-1	2		1.955	mg/L	98	95	105			
WG527569ICB	ICB	09/20/21 18:05				U	mg/L		-0.18	0.18			
WG527569PQV	PQV	09/20/21 18:08	II210901-4	.150015		.122	mg/L	81	70	130			
WG527569SIC	SIC	09/20/21 18:11	II210907-1	200.170015		196.2	mg/L	98	1	200			
WG527569LFB	LFB	09/20/21 18:17	II210910-2	1.0001		.992	mg/L	99	85	115			
L68460-02AS	AS	09/20/21 18:36	II210910-2	1.0001	U	1.037	mg/L	104	85	115			
L68460-02ASD	ASD	09/20/21 18:39	II210910-2	1.0001	U	1.033	mg/L	103	85	115	0	20	
WG527569CCV1	CCV	09/20/21 18:48	II210916-2	1		.98	mg/L	98	90	110			
WG527569CCB1	CCB	09/20/21 18:51				U	mg/L		-0.18	0.18			
WG527569CCV2	CCV	09/20/21 19:25	II210916-2	1		.998	mg/L	100	90	110			
WG527569CCB2	CCB	09/20/21 19:28				U	mg/L		-0.18	0.18			
WG527569CCV3	CCV	09/20/21 19:47	II210916-2	1		1.011	mg/L	101	90	110			
WG527569CCB3	CCB	09/20/21 19:50				U	mg/L		-0.18	0.18			

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Iron, total recoverable

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527560													
WG527560ICV	ICV	09/20/21 18:15	II210916-1	2		1.991	mg/L	100	95	105			
WG527560ICB	ICB	09/20/21 18:21				U	mg/L		-0.18	0.18			
WG527560PQV	PQV	09/20/21 18:24	II210901-4	.150015		.177	mg/L	118	70	130			
WG527560SIC	SIC	09/20/21 18:27	II210907-1	200.170015		197	mg/L	98	1	200			
WG527464LRB	LRB	09/20/21 18:34				U	mg/L		-0.132	0.132			
WG527464LFB	LFB	09/20/21 18:37	II210910-2	1.0001		1.011	mg/L	101	85	115			
WG527560CCV1	CCV	09/20/21 19:06	II210916-2	1		1.018	mg/L	102	90	110			
WG527560CCB1	CCB	09/20/21 19:09				U	mg/L		-0.18	0.18			
WG527560CCV2	CCV	09/20/21 19:45	II210916-2	1		1.035	mg/L	104	90	110			
WG527560CCB2	CCB	09/20/21 19:49				U	mg/L		-0.18	0.18			
L68418-10LFM	LFM	09/20/21 19:55	II210910-2	1.0001	.35	1.341	mg/L	99	70	130			
L68418-10LFMD	LFMD	09/20/21 19:58	II210910-2	1.0001	.35	1.359	mg/L	101	70	130	1	20	
WG527560CCV3	CCV	09/20/21 20:11	II210916-2	1		1.036	mg/L	104	90	110			
WG527560CCB3	CCB	09/20/21 20:14				U	mg/L		-0.18	0.18			

Lead, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527694													
WG527694ICV	ICV	09/21/21 16:06	MS210727-2	.05		.0507	mg/L	101	90	110			
WG527694ICB	ICB	09/21/21 16:07				U	mg/L		-0.00022	0.00022			
WG527694LFB	LFB	09/21/21 16:09	MS210827-2	.05005		.05134	mg/L	103	85	115			
L68448-02AS	AS	09/21/21 16:18	MS210827-2	.05005	U	.05058	mg/L	101	70	130			
L68448-02ASD	ASD	09/21/21 16:20	MS210827-2	.05005	U	.05121	mg/L	102	70	130	1	20	
WG527694CCV1	CCV	09/21/21 16:28	MS210909-2	.25025		.25377	mg/L	101	90	110			
WG527694CCB1	CCB	09/21/21 16:29				U	mg/L		-0.0003	0.0003			
WG527694CCV2	CCV	09/21/21 16:50	MS210909-2	.25025		.24356	mg/L	97	90	110			
WG527694CCB2	CCB	09/21/21 16:51				U	mg/L		-0.0003	0.0003			
WG527694CCV3	CCV	09/21/21 17:03	MS210909-2	.25025		.24754	mg/L	99	90	110			
WG527694CCB3	CCB	09/21/21 17:04				U	mg/L		-0.0003	0.0003			

Lead, total recoverable

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527692													
WG527692ICV	ICV	09/21/21 14:51	MS210727-2	.05		.05026	mg/L	101	90	110			
WG527692ICB	ICB	09/21/21 14:53				U	mg/L		-0.0003	0.0003			
WG527530LRB	LRB	09/21/21 14:54				U	mg/L		-0.00022	0.00022			
WG527530LFB	LFB	09/21/21 14:56	MS210827-2	.05005		.04978	mg/L	99	85	115			
L68448-03LFM	LFM	09/21/21 15:03	MS210827-2	.05005	.191	.24948	mg/L	117	70	130			
L68448-03LFMD	LFMD	09/21/21 15:05	MS210827-2	.05005	.191	.24914	mg/L	116	70	130	0	20	
WG527692CCV1	CCV	09/21/21 15:13	MS210909-2	.25025		.24595	mg/L	98	90	110			
WG527692CCB1	CCB	09/21/21 15:14				U	mg/L		-0.0003	0.0003			
WG527692CCV2	CCV	09/21/21 15:34	MS210909-2	.25025		.24696	mg/L	99	90	110			
WG527692CCB2	CCB	09/21/21 15:36				.00012	mg/L		-0.0003	0.0003			
WG527692CCV3	CCV	09/21/21 15:49	MS210909-2	.25025		.24868	mg/L	99	90	110			
WG527692CCB3	CCB	09/21/21 15:51				U	mg/L		-0.0003	0.0003			

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527638													
WG527638ICV	ICV	09/21/21 12:35	II210916-1	100		95.44	mg/L	95	95	105			
WG527638ICB	ICB	09/21/21 12:41				U	mg/L		-0.6	0.6			
WG527638PQV	PQV	09/21/21 12:44	II210901-4	1.0001		.98	mg/L	98	70	130			
WG527638SIC	SIC	09/21/21 12:47	II210907-1	201.0201		202.3	mg/L	101	1	200			
WG527638LFB	LFB	09/21/21 12:53	II210910-2	49.99828		48.39	mg/L	97	85	115			
L68460-02AS	AS	09/21/21 13:11	II210910-2	49.99828	8.27	56.61	mg/L	97	85	115			
L68460-02ASD	ASD	09/21/21 13:14	II210910-2	49.99828	8.27	56.61	mg/L	97	85	115	0	20	
WG527638CCV1	CCV	09/21/21 13:23	II210916-2	50		47.01	mg/L	94	90	110			
WG527638CCB1	CCB	09/21/21 13:26				U	mg/L		-0.6	0.6			
WG527638CCV2	CCV	09/21/21 13:59	II210916-2	50		47.15	mg/L	94	90	110			
WG527638CCB2	CCB	09/21/21 14:02				U	mg/L		-0.6	0.6			
WG527638CCV3	CCV	09/21/21 14:21	II210916-2	50		46.71	mg/L	93	90	110			
WG527638CCB3	CCB	09/21/21 14:24				U	mg/L		-0.6	0.6			

Manganese, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527569													
WG527569ICV	ICV	09/20/21 17:59	II210916-1	2		1.924	mg/L	96	95	105			
WG527569ICB	ICB	09/20/21 18:05				U	mg/L		-0.03	0.03			
WG527569PQV	PQV	09/20/21 18:08	II210901-4	.05005		.043	mg/L	86	70	130			
WG527569SIC	SIC	09/20/21 18:11	II210907-1	50.10005		48.03	mg/L	96	1	200			
WG527569LFB	LFB	09/20/21 18:17	II210910-2	.5005		.491	mg/L	98	85	115			
L68460-02AS	AS	09/20/21 18:36	II210910-2	.5005	U	.513	mg/L	102	85	115			
L68460-02ASD	ASD	09/20/21 18:39	II210910-2	.5005	U	.515	mg/L	103	85	115	0	20	
WG527569CCV1	CCV	09/20/21 18:48	II210916-2	1		.976	mg/L	98	90	110			
WG527569CCB1	CCB	09/20/21 18:51				U	mg/L		-0.03	0.03			
WG527569CCV2	CCV	09/20/21 19:25	II210916-2	1		.994	mg/L	99	90	110			
WG527569CCB2	CCB	09/20/21 19:28				U	mg/L		-0.03	0.03			
WG527569CCV3	CCV	09/20/21 19:47	II210916-2	1		1.004	mg/L	100	90	110			
WG527569CCB3	CCB	09/20/21 19:50				U	mg/L		-0.03	0.03			

Manganese, total recoverable

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527560													
WG527560ICV	ICV	09/20/21 18:15	II210916-1	2		1.938	mg/L	97	95	105			
WG527560ICB	ICB	09/20/21 18:21				.011	mg/L		-0.03	0.03			
WG527560PQV	PQV	09/20/21 18:24	II210901-4	.05005		.061	mg/L	122	70	130			
WG527560SIC	SIC	09/20/21 18:27	II210907-1	50.10005		47.18	mg/L	94	1	200			
WG527464LRB	LRB	09/20/21 18:34				.012	mg/L		-0.022	0.022			
WG527464LFB	LFB	09/20/21 18:37	II210910-2	.5005		.489	mg/L	98	85	115			
WG527560CCV1	CCV	09/20/21 19:06	II210916-2	1		.985	mg/L	99	90	110			
WG527560CCB1	CCB	09/20/21 19:09				.01	mg/L		-0.03	0.03			
WG527560CCV2	CCV	09/20/21 19:45	II210916-2	1		1.002	mg/L	100	90	110			
WG527560CCB2	CCB	09/20/21 19:49				.01	mg/L		-0.03	0.03			
L68418-10LFM	LFM	09/20/21 19:55	II210910-2	.5005	.082	.558	mg/L	95	70	130			
L68418-10LFMD	LFMD	09/20/21 19:58	II210910-2	.5005	.082	.571	mg/L	98	70	130	2	20	
WG527560CCV3	CCV	09/20/21 20:11	II210916-2	1		.997	mg/L	100	90	110			
WG527560CCB3	CCB	09/20/21 20:14				.01	mg/L		-0.03	0.03			

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, total

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527527													
WG527527ICV	ICV	09/20/21 11:56	HG210913-3	.00501		.00506	mg/L	101	95	105			
WG527527ICB	ICB	09/20/21 11:57				U	mg/L		-0.0002	0.0002			
WG527552													
WG527552CCV1	CCV	09/20/21 13:42	HG210913-3	.00501		.00498	mg/L	99	90	110			
WG527552CCB1	CCB	09/20/21 13:43				U	mg/L		-0.0002	0.0002			
WG527552PQV	PQV	09/20/21 13:44	HG210913-5	.001001		.0009	mg/L	90	70	130			
WG527552LRB	LRB	09/20/21 13:45				U	mg/L		-0.00044	0.00044			
WG527552LFB	LFB	09/20/21 13:46	HG210913-6	.002002		.00171	mg/L	85	85	115			
L68411-01LFM	LFM	09/20/21 13:48	HG210913-6	.002002	U	.00183	mg/L	91	85	115			
L68411-01LFMD	LFMD	09/20/21 13:48	HG210913-6	.002002	U	.00182	mg/L	91	85	115	1	20	
WG527552CCV2	CCV	09/20/21 13:53	HG210913-3	.00501		.00496	mg/L	99	90	110			
WG527552CCB2	CCB	09/20/21 13:54				U	mg/L		-0.0002	0.0002			
WG527552CCV3	CCV	09/20/21 14:05	HG210913-3	.00501		.00483	mg/L	96	90	110			
WG527552CCB3	CCB	09/20/21 14:05				U	mg/L		-0.0002	0.0002			
WG527552CCV4	CCV	09/20/21 14:13	HG210913-3	.00501		.00507	mg/L	101	90	110			
WG527552CCB4	CCB	09/20/21 14:14				U	mg/L		-0.0002	0.0002			

Nitrate/Nitrite as N, dissolved

M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527194													
WG527194ICV	ICV	09/15/21 0:32	WI210904-1	2.4161		2.394	mg/L	99	90	110			
WG527194ICB	ICB	09/15/21 0:33				U	mg/L		-0.02	0.02			
WG527194LFB	LFB	09/15/21 0:37	WI210331-13	2		1.994	mg/L	100	90	110			
WG527194CCV1	CCV	09/15/21 0:47	WI210908-9	2		2.005	mg/L	100	90	110			
WG527194CCB1	CCB	09/15/21 0:51				U	mg/L		-0.02	0.02			
L68436-05AS	AS	09/15/21 0:59	WI210331-13	2	.893	2.881	mg/L	99	90	110			
L68448-01DUP	DUP	09/15/21 1:02			.228	.222	mg/L				3	20	
WG527194CCV2	CCV	09/15/21 1:04	WI210908-9	2		1.996	mg/L	100	90	110			
WG527194CCB2	CCB	09/15/21 1:08				U	mg/L		-0.02	0.02			
WG527194CCV3	CCV	09/15/21 1:23	WI210908-9	2		1.994	mg/L	100	90	110			
WG527194CCB3	CCB	09/15/21 1:26				U	mg/L		-0.02	0.02			
WG527194CCV4	CCV	09/15/21 1:34	WI210908-9	2		1.993	mg/L	100	90	110			
WG527194CCB4	CCB	09/15/21 1:38				U	mg/L		-0.02	0.02			

Nitrite as N, dissolved

M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527194													
WG527194ICV	ICV	09/15/21 0:32	WI210904-1	.6089		.64	mg/L	105	90	110			
WG527194ICB	ICB	09/15/21 0:33				U	mg/L		-0.01	0.01			
WG527194LFB	LFB	09/15/21 0:37	WI210331-13	1		1	mg/L	100	90	110			
WG527194CCV1	CCV	09/15/21 0:47	WI210908-9	1		.99	mg/L	99	90	110			
WG527194CCB1	CCB	09/15/21 0:51				U	mg/L		-0.01	0.01			
L68436-05AS	AS	09/15/21 0:59	WI210331-13	1	U	.996	mg/L	100	90	110			
L68448-01DUP	DUP	09/15/21 1:02			U	U	mg/L				0	20	RA
WG527194CCV2	CCV	09/15/21 1:04	WI210908-9	1		.951	mg/L	95	90	110			
WG527194CCB2	CCB	09/15/21 1:08				U	mg/L		-0.01	0.01			
WG527194CCV3	CCV	09/15/21 1:23	WI210908-9	1		.983	mg/L	98	90	110			
WG527194CCB3	CCB	09/15/21 1:26				U	mg/L		-0.01	0.01			

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrogen, ammonia

M350.1 Auto Salicylate w/gas diffusion

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527877													
WG527877ICV	ICV	09/26/21 17:23	WI210713-1	11.988		12.252	mg/L	102	90	110			
WG527877ICB	ICB	09/26/21 17:25				U	mg/L		-0.05	0.05			
WG527877LFB1	LFB	09/26/21 17:29	WI210901-5	10		9.302	mg/L	93	90	110			
WG527877CCV1	CCV	09/26/21 17:44	WI210901-4	10		9.729	mg/L	97	90	110			
WG527877CCB1	CCB	09/26/21 17:45				U	mg/L		-0.05	0.05			
WG527877CCV2	CCV	09/26/21 18:03	WI210901-4	10		10.066	mg/L	101	90	110			
WG527877CCB2	CCB	09/26/21 18:05				U	mg/L		-0.05	0.05			
WG527877CCV3	CCV	09/26/21 18:21	WI210901-4	10		10.469	mg/L	105	90	110			
WG527877CCB3	CCB	09/26/21 18:22				U	mg/L		-0.05	0.05			
L68465-01AS	AS	09/26/21 18:31	WI210901-5	10	U	10.822	mg/L	108	90	110			
L68465-03DUP	DUP	09/26/21 18:34			.059	U	mg/L				200	20	RA
WG527877CCV4	CCV	09/26/21 18:38	WI210901-4	10		10.272	mg/L	103	90	110			
WG527877CCB4	CCB	09/26/21 18:40				U	mg/L		-0.05	0.05			
WG527877ICV1	ICV	09/26/21 20:10	WI210713-1	11.988		12.061	mg/L	101	90	110			
WG527877ICB1	ICB	09/26/21 20:11				U	mg/L		-0.05	0.05			
WG527877LFB2	LFB	09/26/21 20:16	WI210901-5	10		10.684	mg/L	107	90	110			
WG527877CCV5	CCV	09/26/21 20:20	WI210901-4	10		9.951	mg/L	100	90	110			
WG527877CCB5	CCB	09/26/21 20:21				U	mg/L		-0.05	0.05			

Nitrogen, total Kjeldahl

M351.2 - TKN by Block Digester

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527920													
WG527920ICV	ICV	09/23/21 21:46	WI210922-8	4		3.93	mg/L	98	90	110			
WG527920ICB	ICB	09/23/21 21:47				U	mg/L		-0.2	0.2			
WG527920LRB	LRB	09/23/21 21:48				U	mg/L		-0.2	0.2			
WG527920LFB	LFB	09/23/21 21:50	WI210714-5	2.5		2.6	mg/L	104	90	110			
L68325-01LFM	LFM	09/23/21 21:52	WI210714-5	2.5	U	2.64	mg/L	106	90	110			
L68413-01DUP	DUP	09/23/21 21:54			.95	.95	mg/L				0	20	RA
WG527920CCV1	CCV	09/23/21 22:00	WI210922-7	2.5		2.45	mg/L	98	90	110			
WG527920CCB1	CCB	09/23/21 22:01				U	mg/L		-0.2	0.2			
L68448-02LFM	LFM	09/23/21 22:07	WI210714-5	2.5	.49	2.88	mg/L	96	90	110			
L68448-03DUP	DUP	09/23/21 22:10			.88	.87	mg/L				1	20	RA
WG527920CCV2	CCV	09/23/21 22:13	WI210922-7	2.5		2.46	mg/L	98	90	110			
WG527920CCB2	CCB	09/23/21 22:14				U	mg/L		-0.2	0.2			
WG527920CCV3	CCV	09/23/21 22:28	WI210922-7	2.5		2.46	mg/L	98	90	110			
WG527920CCB3	CCB	09/23/21 22:29				U	mg/L		-0.2	0.2			

pH (lab)

SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527916													
WG527916LCSW1	LCSW	09/23/21 17:19	PCN62948	6		6.1	units	102	5.9	6.1			
L68495-01DUP	DUP	09/23/21 20:53			8.5	8.5	units				0	20	
WG527916LCSW4	LCSW	09/23/21 20:58	PCN62948	6		6.1	units	102	5.9	6.1			
WG527916LCSW7	LCSW	09/24/21 0:35	PCN62948	6		6.1	units	102	5.9	6.1			
WG527916LCSW10	LCSW	09/24/21 4:47	PCN62948	6		6.1	units	102	5.9	6.1			
WG527916LCSW13	LCSW	09/24/21 8:23	PCN62948	6		6.1	units	102	5.9	6.1			

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Potassium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527569													
WG527569ICV	ICV	09/20/21 17:59	II210916-1	20		19.54	mg/L	98	95	105			
WG527569ICB	ICB	09/20/21 18:05				U	mg/L		-0.6	0.6			
WG527569PQV	PQV	09/20/21 18:08	II210901-4	.9958		.97	mg/L	97	70	130			
WG527569SIC	SIC	09/20/21 18:11	II210907-1	.9958		.94	mg/L	94	80	120			
WG527569LFB	LFB	09/20/21 18:17	II210910-2	99.96008		98.33	mg/L	98	85	115			
L68460-02AS	AS	09/20/21 18:36	II210910-2	99.96008	1.69	102.5	mg/L	101	85	115			
L68460-02ASD	ASD	09/20/21 18:39	II210910-2	99.96008	1.69	102.9	mg/L	101	85	115	0	20	
WG527569CCV1	CCV	09/20/21 18:48	II210916-2	10		9.83	mg/L	98	90	110			
WG527569CCB1	CCB	09/20/21 18:51				U	mg/L		-0.6	0.6			
WG527569CCV2	CCV	09/20/21 19:25	II210916-2	10		9.94	mg/L	99	90	110			
WG527569CCB2	CCB	09/20/21 19:28				U	mg/L		-0.6	0.6			
WG527569CCV3	CCV	09/20/21 19:47	II210916-2	10		10.11	mg/L	101	90	110			
WG527569CCB3	CCB	09/20/21 19:50				U	mg/L		-0.6	0.6			

Residue, Filterable (TDS) @180C

SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527471													
WG527471PBW	PBW	09/17/21 13:15				U	mg/L		-20	20			
WG527471LCSW	LCSW	09/17/21 13:16	PCN64119	1000		976	mg/L	98	80	120			
L68448-01DUP	DUP	09/17/21 13:22			184	196	mg/L				6	10	RA

Silver, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527694													
WG527694ICV	ICV	09/21/21 16:06	MS210727-2	.02		.02116	mg/L	106	90	110			
WG527694ICB	ICB	09/21/21 16:07				U	mg/L		-0.00022	0.00022			
WG527694LFB	LFB	09/21/21 16:09	MS210827-2	.01002		.01129	mg/L	113	85	115			
L68448-02AS	AS	09/21/21 16:18	MS210827-2	.01002	U	.01059	mg/L	106	70	130			
L68448-02ASD	ASD	09/21/21 16:20	MS210827-2	.01002	U	.01087	mg/L	108	70	130	3	20	
WG527694CCV1	CCV	09/21/21 16:28	MS210909-2	.02505		.02554	mg/L	102	90	110			
WG527694CCB1	CCB	09/21/21 16:29				U	mg/L		-0.0003	0.0003			
WG527694CCV2	CCV	09/21/21 16:50	MS210909-2	.02505		.02474	mg/L	99	90	110			
WG527694CCB2	CCB	09/21/21 16:51				U	mg/L		-0.0003	0.0003			
WG527694CCV3	CCV	09/21/21 17:03	MS210909-2	.02505		.02528	mg/L	101	90	110			
WG527694CCB3	CCB	09/21/21 17:04				U	mg/L		-0.0003	0.0003			

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Silver, total recoverable

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527692													
WG527692ICV	ICV	09/21/21 14:51	MS210727-2	.02		.02063	mg/L	103	90	110			
WG527692ICB	ICB	09/21/21 14:53				U	mg/L		-0.0003	0.0003			
WG527530LRB	LRB	09/21/21 14:54				U	mg/L		-0.00022	0.00022			
WG527530LFB	LFB	09/21/21 14:56	MS210827-2	.01002		.01085	mg/L	108	85	115			
L68448-03LFM	LFM	09/21/21 15:03	MS210827-2	.01002	.00324	.01393	mg/L	107	70	130			
L68448-03LFMD	LFMD	09/21/21 15:05	MS210827-2	.01002	.00324	.01376	mg/L	105	70	130	1	20	
WG527692CCV1	CCV	09/21/21 15:13	MS210909-2	.02505		.0246	mg/L	98	90	110			
WG527692CCB1	CCB	09/21/21 15:14				U	mg/L		-0.0003	0.0003			
WG527692CCV2	CCV	09/21/21 15:34	MS210909-2	.02505		.02507	mg/L	100	90	110			
WG527692CCB2	CCB	09/21/21 15:36				U	mg/L		-0.0003	0.0003			
WG527692CCV3	CCV	09/21/21 15:49	MS210909-2	.02505		.02472	mg/L	99	90	110			
WG527692CCB3	CCB	09/21/21 15:51				U	mg/L		-0.0003	0.0003			

Sodium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527569													
WG527569ICV	ICV	09/20/21 17:59	II210916-1	100		99.43	mg/L	99	95	105			
WG527569ICB	ICB	09/20/21 18:05				.26	mg/L		-0.6	0.6			
WG527569PQV	PQV	09/20/21 18:08	II210901-4	1.0053		.98	mg/L	97	70	130			
WG527569SIC	SIC	09/20/21 18:11	II210907-1	1.0053		1.02	mg/L	101	80	120			
WG527569LFB	LFB	09/20/21 18:17	II210910-2	100.007		99.55	mg/L	100	85	115			
L68460-02AS	AS	09/20/21 18:36	II210910-2	100.007	7.46	108.9	mg/L	101	85	115			
L68460-02ASD	ASD	09/20/21 18:39	II210910-2	100.007	7.46	108.8	mg/L	101	85	115	0	20	
WG527569CCV1	CCV	09/20/21 18:48	II210916-2	50		49.92	mg/L	100	90	110			
WG527569CCB1	CCB	09/20/21 18:51				U	mg/L		-0.6	0.6			
WG527569CCV2	CCV	09/20/21 19:25	II210916-2	50		50.31	mg/L	101	90	110			
WG527569CCB2	CCB	09/20/21 19:28				U	mg/L		-0.6	0.6			
WG527569CCV3	CCV	09/20/21 19:47	II210916-2	50		50.72	mg/L	101	90	110			
WG527569CCB3	CCB	09/20/21 19:50				.23	mg/L		-0.6	0.6			

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate

M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523874													
WG523874ICV	ICV	07/22/21 20:38	WI210719-3	51.15		49.54	mg/L	97	90	110			
WG523874ICB	ICB	07/22/21 20:56				U	mg/L		-0.4	0.4			
WG527655													
WG527655CCV1	CCV	09/21/21 17:30	WI210915-3	50		48.13	mg/L	96	90	110			
WG527655CCB1	CCB	09/21/21 17:48				U	mg/L		-0.4	0.4			
WG527655PQV	PQV	09/21/21 18:06	WI210915-2	2.046		1.58	mg/L	77	70	130			
WG527655LFB1	LFB	09/21/21 18:24	WI210907-6	30		28.43	mg/L	95	90	110			
L68448-01AS	AS	09/21/21 19:35	WI210907-6	60	79.7	137.56	mg/L	96	90	110			
WG527655CCV2	CCV	09/21/21 21:05	WI210915-3	50		47.56	mg/L	95	90	110			
WG527655CCB2	CCB	09/21/21 21:23				U	mg/L		-0.4	0.4			
WG527655CCV3	CCV	09/22/21 0:40	WI210915-3	50		47.91	mg/L	96	90	110			
WG527655CCB3	CCB	09/22/21 0:58				U	mg/L		-0.4	0.4			
WG527655LFB2	LFB	09/22/21 3:03	WI210907-6	30		28.02	mg/L	93	90	110			
WG527655CCV4	CCV	09/22/21 4:15	WI210915-3	50		48.09	mg/L	96	90	110			
WG527655CCB4	CCB	09/22/21 4:33				U	mg/L		-0.4	0.4			
WG527655CCV5	CCV	09/22/21 7:32	WI210915-3	50		48.29	mg/L	97	90	110			
WG527655CCB5	CCB	09/22/21 7:50				U	mg/L		-0.4	0.4			
WG527655CCV6	CCV	09/23/21 14:49	WI210915-3	50		48.33	mg/L	97	90	110			
WG527655CCB6	CCB	09/23/21 15:07				U	mg/L		-0.4	0.4			
WG527655PQV1	PQV	09/23/21 15:25	WI210915-2	2.046		1.65	mg/L	81	70	130			
WG527655LFB1	LFB	09/23/21 15:43	WI210907-6	30		29.25	mg/L	98	90	110			
L68389-01DUP	DUP	09/23/21 16:18			3.3	3.32	mg/L				1	20	RA
WG527655CCV7	CCV	09/23/21 18:24	WI210915-3	50		48.09	mg/L	96	90	110			
WG527655CCB7	CCB	09/23/21 18:42				U	mg/L		-0.4	0.4			
WG527655LFB2	LFB	09/23/21 19:00	WI210907-6	30		28.84	mg/L	96	90	110			
WG527655CCV8	CCV	09/23/21 20:47	WI210915-3	50		47.71	mg/L	95	90	110			
WG527655CCB8	CCB	09/23/21 21:05				U	mg/L		-0.4	0.4			

Sulfide as S

SM4500S2-D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527168													
WG527168ICV	ICV	09/14/21 14:11	WC210914-3	.37334		.357	mg/L	96	90	110			
WG527168ICB	ICB	09/14/21 14:16				U	mg/L		-0.05	0.05			
WG527168LFB	LFB	09/14/21 14:21	WC210914-6	.2257733		.255	mg/L	113	80	120			
WG527168CCV1	CCV	09/14/21 15:13	WC210914-4	.16933		.166	mg/L	98	90	110			
WG527168CCB1	CCB	09/14/21 15:18				U	mg/L		-0.05	0.05			
L68448-02AS	AS	09/14/21 15:28	WC210914-6	.2257733	U	.122	mg/L	54	75	125			M2
L68448-02ASD	ASD	09/14/21 15:33	WC210914-6	.2257733	U	.129	mg/L	57	75	125	6	20	M2
L68449-03AS	AS	09/14/21 15:59	WC210914-6	.2257733	U	.259	mg/L	115	75	125			
L68449-03ASD	ASD	09/14/21 16:04	WC210914-6	.2257733	U	.257	mg/L	114	75	125	1	20	
WG527168CCV2	CCV	09/14/21 16:09	WC210914-4	.16933		.166	mg/L	98	90	110			
WG527168CCB2	CCB	09/14/21 16:15				U	mg/L		-0.05	0.05			

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527694													
WG527694ICV	ICV	09/21/21 16:06	MS210727-2	.05		.0491	mg/L	98	90	110			
WG527694ICB	ICB	09/21/21 16:07				U	mg/L		-0.0132	0.0132			
WG527694LFB	LFB	09/21/21 16:09	MS210827-2	.050075		.0515	mg/L	103	85	115			
L68448-02AS	AS	09/21/21 16:18	MS210827-2	.050075	.667	.7092	mg/L	84	70	130			
L68448-02ASD	ASD	09/21/21 16:20	MS210827-2	.050075	.667	.7238	mg/L	113	70	130	2	20	
WG527694CCV1	CCV	09/21/21 16:28	MS210909-2	.50075		.5035	mg/L	101	90	110			
WG527694CCB1	CCB	09/21/21 16:29				U	mg/L		-0.018	0.018			
WG527694CCV2	CCV	09/21/21 16:50	MS210909-2	.50075		.4911	mg/L	98	90	110			
WG527694CCB2	CCB	09/21/21 16:51				U	mg/L		-0.018	0.018			
WG527694CCV3	CCV	09/21/21 17:03	MS210909-2	.50075		.4904	mg/L	98	90	110			
WG527694CCB3	CCB	09/21/21 17:04				U	mg/L		-0.018	0.018			

Zinc, total recoverable

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527692													
WG527692ICV	ICV	09/21/21 14:51	MS210727-2	.05		.0489	mg/L	98	90	110			
WG527692ICB	ICB	09/21/21 14:53				U	mg/L		-0.018	0.018			
WG527530LRB	LRB	09/21/21 14:54				U	mg/L		-0.0132	0.0132			
WG527530LFB	LFB	09/21/21 14:56	MS210827-2	.050075		.0508	mg/L	101	85	115			
L68448-03LFM	LFM	09/21/21 15:03	MS210827-2	.050075	8.71	9.1493	mg/L	877	70	130			M3
L68448-03LFMD	LFMD	09/21/21 15:05	MS210827-2	.050075	8.71	8.9739	mg/L	527	70	130	2	20	M3
WG527692CCV1	CCV	09/21/21 15:13	MS210909-2	.50075		.5032	mg/L	100	90	110			
WG527692CCB1	CCB	09/21/21 15:14				U	mg/L		-0.018	0.018			
WG527692CCV2	CCV	09/21/21 15:34	MS210909-2	.50075		.5063	mg/L	101	90	110			
WG527692CCB2	CCB	09/21/21 15:36				U	mg/L		-0.018	0.018			
WG527692CCV3	CCV	09/21/21 15:49	MS210909-2	.50075		.4988	mg/L	100	90	110			
WG527692CCB3	CCB	09/21/21 15:51				U	mg/L		-0.018	0.018			

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68448-01	WG527444	Carbon, dissolved organic (DOC)	SM5310B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527655	Chloride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527194	Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527877	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527920	Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527471	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527655	Sulfate	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527168	Sulfide as S	SM4500S2-D	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
L68448-02	WG527692	Zinc, total recoverable	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527444	Carbon, dissolved organic (DOC)	SM5310B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527655	Chloride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527194	Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527877	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527920	Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527471	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527655	Sulfate	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527168	Sulfide as S	SM4500S2-D	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
L68448-03	WG527692	Zinc, total recoverable	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68448-03	WG527444	Carbon, dissolved organic (DOC)	SM5310B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527655	Chloride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527194	Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527877	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527920	Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527471	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527655	Sulfate	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527168	Sulfide as S	SM4500S2-D	QD	Reported value is the background-corrected concentration, as described by the method.
	WG527692	Zinc, total recoverable	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Rio Grande Silver, Inc.

Project ID:

Sample ID: HW-2

ACZ Sample ID: **L68448-01**

Date Sampled: 09/13/21 10:35

Date Received: 09/14/21

Sample Matrix: Groundwater

Oil & Grease, Total Recoverable

Analysis Method: **1664A/B - Gravimetric**

Extract Method:

Workgroup: WG527331

Analyst: CAM

Extract Date:

Analysis Date: 09/16/21 9:32

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Oil and Grease		<2	U	1	*	mg/L	2	10

Rio Grande Silver, Inc.

Project ID:

Sample ID: GW-1

ACZ Sample ID: **L68448-02**

Date Sampled: 09/13/21 11:00

Date Received: 09/14/21

Sample Matrix: Groundwater

Oil & Grease, Total Recoverable

Analysis Method: **1664A/B - Gravimetric**

Extract Method:

Workgroup: WG527331

Analyst: CAM

Extract Date:

Analysis Date: 09/16/21 10:04

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Oil and Grease		<2	U	1	*	mg/L	2	10

Rio Grande Silver, Inc.

Project ID:

Sample ID: DP-5

ACZ Sample ID: **L68448-03**

Date Sampled: 09/13/21 10:00

Date Received: 09/14/21

Sample Matrix: Groundwater

Oil & Grease, Total Recoverable

Analysis Method: **1664A/B - Gravimetric**

Extract Method:

Workgroup: WG527331

Analyst: CAM

Extract Date:

Analysis Date: 09/16/21 10:36

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Oil and Grease		<2	U	1	*	mg/L	2	10

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>LCL</i>	Lower Control Limit
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #4) Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>UCL</i>	Upper Control Limit
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>SURR</i>	Surrogate	<i>LFB</i>	Laboratory Fortified Blank
<i>INTS</i>	Internal Standard	<i>LFM</i>	Laboratory Fortified Matrix
<i>AS</i>	Analytical Spike (Post Digestion)	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>DUP</i>	Sample Duplicate	<i>MS/MSD</i>	Matrix Spike/Matrix Spike Duplicate
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBS</i>	Prep Blank - Soil
<i>LCSW</i>	Laboratory Control Sample - Water	<i>PBW</i>	Prep Blank - Water

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

O	Analyte concentration is estimated due to result exceeding calibration range.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
J	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/4-90/020. Methods for the Determination of Organic Compounds in Drinking Water (I), July 1990.
- (3) EPA 600/R-92/129. Methods for the Determination of Organic Compounds in Drinking Water (II), July 1990.
- (4) EPA SW-846. Test Methods for Evaluating Solid Waste.
- (5) Standard Methods for the Examination of Water and Wastewater.

Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Excluding Oil & Grease, solid & biological matrices for organic analyses are reported on a wet weight basis.
- (3) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
- (4) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://aczel.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Oil & Grease, Total Recoverable

1664A/B - Gravimetric

WG527331

LCSW	Sample ID: WG527331LCSW			PCN/SCN: OP210909-2			Analyzed: 09/16/21 12:12			
Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40		21.5	mg/L	54.0	78	114			RJ

LCSWD		Sample ID: WG527331LCSWD			PCN/SCN: OP210909-2			Analyzed: 09/16/21 12:45			
Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual	
OIL AND GREASE	40		37.5	mg/L	94.0	78	114	54	18	RJ	

PBW		Sample ID: WG527331PBW						Analyzed:		09/16/21 9:00	
Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual	
OIL AND GREASE			U	mg/L							

ACZ Project ID: **L68448**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68448-01	WG527331	Oil and Grease	1664A/B - Gravimetric	Q9	Insufficient sample received to meet method QC requirements.
			1664A/B - Gravimetric	RJ	LCS/LCSD RPD or RSD exceeded the method or laboratory control limit. Sample(s) could not be re-prepped. See Case Narrative.
L68448-02	WG527331	Oil and Grease	1664A/B - Gravimetric	Q9	Insufficient sample received to meet method QC requirements.
			1664A/B - Gravimetric	RJ	LCS/LCSD RPD or RSD exceeded the method or laboratory control limit. Sample(s) could not be re-prepped. See Case Narrative.
L68448-03	WG527331	Oil and Grease	1664A/B - Gravimetric	Q9	Insufficient sample received to meet method QC requirements.
			1664A/B - Gravimetric	RJ	LCS/LCSD RPD or RSD exceeded the method or laboratory control limit. Sample(s) could not be re-prepped. See Case Narrative.

Rio Grande Silver, Inc.

ACZ Project ID: **L68448**

No certification qualifiers associated with this analysis

Rio Grande Silver, Inc.

ACZ Project ID: L68448

Date Received: 09/14/2021 10:14

Received By:

Date Printed: 9/15/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?	☐	☐	☒
2) Is the Chain of Custody form or other directive shipping papers present?	☒	☐	☐
3) Does this project require special handling procedures such as CLP protocol?	☐	☒	☐
4) Are any samples NRC licensable material?	☐	☐	☒
5) If samples are received past hold time, proceed with requested short hold time analyses?	☒	☐	☐
6) Is the Chain of Custody form complete and accurate?	☒	☐	☐
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?	☐	☒	☐

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	☒	☐	☐
9) Are all labels on containers and are they intact and legible?	☒	☐	☐
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	☒	☐	☐
11) For preserved bottle types, was the pH checked and within limits? ¹	☒	☐	☐
12) Is there sufficient sample volume to perform all requested work?	☒	☐	☐
13) Is the custody seal intact on all containers?	☐	☐	☒
14) Are samples that require zero headspace acceptable?	☐	☐	☒
15) Are all sample containers appropriate for analytical requirements?	☒	☐	☐
16) Is there an Hg-1631 trip blank present?	☐	☐	☒
17) Is there a VOA trip blank present?	☐	☐	☒
18) Were all samples received within hold time?	☒	☐	☐

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp (°C)	Temp Criteria (°C)	Rad (µR/Hr)	Custody Seal Intact?
-----	-----	-----	-----	-----
6112	2.4	<=6.0	15	Yes

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

Rio Grande Silver, Inc.

ACZ Project ID: L68448

Date Received: 09/14/2021 10:14

Received By:

Date Printed: 9/15/2021

¹ The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na₂S₂O₃ preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

